

Examiner's Amendments to the Claims:

Please cancel claims 67-76.

Claims 31-34, 36, 50-62, 65 and 66 have been amended as follows:

31 (Currently amended). An isolated molecule [which consists of an amino acid sequence] that binds to the hepreceptor, wherein said [hepreceptor binding sequence] molecule consists of 5 to 41 amino acids containing at least 5 consecutive amino acids of SEQ ID NO[.]: 29.

32. (Currently amended). The molecule, according to claim 31, wherein [the hepreceptor binding sequence] said at least 5 consecutive amino acids are located at positions 1-13 in SEQ ID NO[.]:29.

33 (Currently amended). The molecule, according to claim 31, wherein said [hepreceptor binding sequence] molecule consists of from 5 to 14 amino acids.

34 (Currently amended). An isolated molecule [which consists of an amino acid sequence] that binds to the hepreceptor, wherein said [hepreceptor binding sequence] molecule consists of an amino acid sequence selected from the group consisting of:

MREKEELMLRLQDXaaEEKTKKAERELSEQIQRALQ (SEQ ID NO[.]:2);

EREKE (SEQ ID NO[.]:16);

EREKEQMMREKEEL (SEQ ID NO[.]:17);

KEELM (SEQ ID NO[.]:18);

KEELMLRLQDYEE (SEQ ID NO[.]:19);

KEELMLRLQDYpEE (SEQ ID NO[.]:20);

EELMLRLQDYEE (SEQ ID NO[.]:21);

EELMLRLQDYpEE (SEQ ID NO[.]:22);

ELMLRLQDYEE (SEQ ID NO[.]:23);

ELMLRLQDYpEE (SEQ ID NO[.]: 24);

MLRLQ (SEQ ID NO[.]:25);

QDYEE (SEQ ID NO[.]:26); and

Art Unit: 1653

QDYpEE (SEQ ID NO.]:27).

36 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

50 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

51 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

52 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

53 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

54 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

55 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

56 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

57 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

58 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

59 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

60 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

61 (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

62 (Currently amended). A method for upregulating^ε the immune system in a patient with cancer, Human Immunodeficiency Virus (HIV), or a bacteria infection, wherein said method comprises administering[,] to [a] said patient [with cancer, Human Immunodeficiency Virus (HIV), or a bacterial infection,] an effective amount of a molecule [which consists of an amino acid sequence] that binds to the hepreceptor, wherein said [hepreceptor binding sequence] molecule consists of 5 to 41 amino acids containing at least 5 consecutive amino acids of SEQ ID NO.]:29; wherein the administration of said molecule results in upregulation of the immune system in the patient.

65 (Currently amended). The method, according to claim [64] 62, wherein said [hepreceptor binding sequence] molecule has between 5 and 14 amino acids.

66. (currently amended) [The] A method[, according to claim 64] for upregulating^ε the immune system in a patient with cancer, Human Immunodeficiency Virus (HIV), or a bacteria infection, wherein said method comprises administering to said patient an effective amount of a molecule that

Art Unit: 1653

binds to the hepreceptor, wherein said molecule consists of an amino acid sequence selected from the group consisting of:

MREKEELMLRLQDXaaEEKTKKAERELSEQIQRALQ (SEQ ID NO[.]: 2);

EREKE (SEQ ID NO[.]:16);

EREKEQMMREKEEL (SEQ ID NO[.]:17);

KEELM (SEQ ID NO[.]:18);

KEELMLRLQDYEE (SEQ ID NO[.]:19);

KEELMLRLQDYpEE (SEQ ID NO[.]:20);

EELMLRLQDYEE (SEQ ID NO[.]:21);

EELMLRLQDYpEE (SEQ ID NO[.]:22);

ELMLRLQDYEE (SEQ ID NO[.]:23);

ELMLRLQDYpEE (SEQ ID NO[.]: 24);

MLRLQ (SEQ ID NO[.]:25);

QDYEE (SEQ ID NO[.]:26); and

QDYpEE (SEQ ID NO[.]:27).